1.

5

10

15

25

30

7

Claims

- Injection moulding device (1) comprising a mould body (2,5) having a cavity (4), an elongated nozzle (3) seated in the cavity, a valve pin (11) coaxially in the nozzle and actuating means (15) connected to the valve pin for axially displacing the valve pin in the nozzle, the actuating means comprising a cilinder housing (30) having a first pressure medium inlet (38) connected to a pressure medium duct (57) and a second pressure medium inlet (39) connected to a pressure medium duct (56), and a piston (33) reciprocatable in the cylinder housing (30) between an upper end position and a lower end position, the piston (33) being coupled to the valve pin (11), characterised in that the piston comprises a fluid passage (55) via which pressure medium can pass when the piston is in a position between its upper and its lower end position, and which is at least partly closed off when the piston is in its lower and/or its upper end position.
- 2. Injection moulding device (1) according to claim 1, comprising a flow detection means (58,59) in at least one of the pressure medium ducts (56,57), for forming a displacement signal.
- 20 3. Injection moulding device (1) according to claim 2, wherein the displacement signal forms a visual indication of the needle position.
 - 4. Injection moulding device (1) according to any of the preceding claims, wherein the cilinder (15) comprises a height adjustment means (40), displaceable in the cylinder housing (30), for adjusting at least one of the end positions.
 - 5. Injection moulding device (1) according to any of the preceding claims, wherein the flow detection means (58,59) and a signal processing and/or display means (62) connected to the flow detection means are located at a distance from the mould body.

8

medium inlet (38) connected to a first pressure medium duct (37) and a second pressure medium inlet (39) connected to a second pressure medium duct (56), and a piston (35) reciprocatable in the cylinder housing (30) between an upper end position and a lower end position, the piston being suitable to be coupled to the valve pin (11), characterised in that the piston comprises a fluid passage (55) via which pressure medium can pass when the piston is in a position between its upper and its lower end position, and which is closed off when the piston is in its lower and/or its upper end position.

5